



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,529	10/31/2003	Robert H. Wollenberg	T-6298 (538-59)	2770

7590 05/27/2005

Michael E. Carmen, Esq.
DILWORTH & BARRESE, LLP
333 Earle Ovington Blvd.
Uniondale, NY 11553

EXAMINER

WALLENHORST, MAUREEN

ART UNIT	PAPER NUMBER
----------	--------------

1743

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/699,529

Applicant(s)

WOLLENBERG ET AL.

Examiner

Maureen M. Wallenhorst

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/19/04</u> . | 6) <input type="checkbox"/> Other: ____ |

Art Unit: 1743

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 250 words. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because of the inclusion of legal phraseology such as "comprising". Correction is required. See MPEP § 608.01(b).

3. The disclosure is objected to because of the following informalities: On page 21, line 14, page 25, lines 7-8, page 30, lines 11-12 and page 37, line 22 of the specification, it is requested that Applicant insert the serial number and filing date of the referenced patent application. On line 1 of claim 1, the phrase "is provided comprising" should be changed to --comprising--.

Appropriate correction is required.

4. Claims 20-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In part b) of claim 20, the phrase "the lubricating oil composition property data" lacks antecedent basis.

On line 2 of claim 26, the phrase "the computer" lacks antecedent basis.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

Art Unit: 1743

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 20 and 22-23 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 13-14 and 21 of copending Application No. 10/699,510. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims recite a method for producing a combinatorial library of different lubricating oil compositions by combining a major amount of a base oil of lubricating viscosity with a minor amount of an oil additive to form a plurality of lubricating oil composition samples, and placing the samples in a plurality of test reservoirs. In addition, both sets of claims recite analyzing the lubricating oil composition samples for property data.

Art Unit: 1743

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claims 20 and 22-30 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2, 13-18, 20-22 and 33-38 of copending Application No. 10/699,507. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims recite a method for producing and screening lubricating oil additive compositions comprising the steps of providing a plurality of lubricating oil additive compositions, each containing a major amount of a base oil of lubricating viscosity and a minor amount of an oil additive, measuring composition property data such as the storage stability of the samples, and outputting the results.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. Claims 20, 22-24 and 26-30 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 and 10-14 of copending Application No. 10/699,508. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims recite a method for producing and screening lubricating oil additive compositions comprising the steps of providing a plurality of lubricating oil additive compositions, each containing a major amount of a base oil of lubricating viscosity and a minor amount of an oil additive, measuring composition property data such as the oxidation stability of the samples, and outputting the results.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 1743

10. Claims 1 and 17-18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 34 of copending Application No. 10/779,422. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims recite a combinatorial lubricating oil composition library comprising a plurality of different lubricating oil compositions, each containing a major amount of a base oil of lubricating viscosity and a minor amount of an oil additive, and property data of the compositions such as deposit formation.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 1-3, 8-11 and 16-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Carey et al. (US 2004/0144355)

Carey et al teach of a plurality of lubricating oil compositions, wherein each of the compositions contains a primary base oil of lubricating viscosity and a performance-enhancing additive. The primary base oil lubricant can be a natural or synthetic oil or mixtures thereof. The viscosity of the base oil blend is in the range of 5 to about 30 cSt at 100°C. The additives can include detergents, antioxidants, dispersants, pour point depressants, defoamants, extreme pressure additives and antiwear additives. See paragraph nos. 0013 and 0014 in Carey et al. In

Art Unit: 1743

example 2 taught by Carey et al, a series of oil compositions are taught, each having a marine engine oil base with different additives therein. Table II lists the additives used and their amounts. Storage stability data is also presented for each of the compositions listed. The storage stability data refers to the amount of sediment that forms when the compositions are stored at a certain temperature for a certain time period. See paragraph no. 0038 in Carey et al.

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. Claims 4-7 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carey et al. For a teaching of Carey et al, see previous paragraphs in this Office action.

Carey et al fail to teach that the lubricating oil compositions containing an additive therein have the same kinematic viscosities as recited in instant claims 4-7. However, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to formulate the lubricating oil compositions taught by Carey et al to have the same kinematic viscosities as recited in instant claims 4-7 so as to make them suitable for a particular intended

Art Unit: 1743

use, and since the kinematic viscosities of the compositions depend upon the choice of base oil and additive combined together.

16. Claims 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carey et al in view of Kolosov et al. For a teaching of Carey et al, see previous paragraphs in this Office action. Carey et al fail to teach that the plurality of lubricating oil compositions containing additives therein can be present in a plurality of test reservoirs that form a combinatorial array.

Kolosov et al teach of a high throughput testing method and apparatus for the screening of a library of material samples. The method and apparatus involve combinatorial chemistry that refers to the synthesis of a collection of diverse materials, and the screening of the materials for desirable performance characteristics and properties. The combinatorial approach can effectively evaluate much larger numbers of diverse compounds in a much shorter period of time. The apparatus taught by Kolosov et al includes a plurality of samples supported in wells on a substrate. Kolosov et al teach that the invention can be used to screen libraries of any flowable material that may be a commercial product itself or may be a portion of a commercial product. Exemplary commercial products that can be tested with the apparatus taught by Kolosov et al include lubricants and oils. The invention can be used to analyze the resulting properties of a particular flowing material, and to analyze the relative or comparative effects that an additive has upon a particular flowable material. Additives in a flowable material to be tested include a detergent, a flow modifier, etc. See paragraph nos. 0042-0043 in Kolosov et al. The screening for the effects of different additives upon the characteristics of a flowing material is performed by measuring various properties of the material samples present in the wells on the substrate. Properties measured include the viscosity, the density, the thermal degradation, the

Art Unit: 1743

aging characteristics, the chemical composition and the agglomeration or sedimentation of the material samples. See paragraph no. 0065 in Kolosov et al. Once the characterizing properties of the samples are determined, the results may be mathematically combined in various combinations to provide figures of merit for the properties of interest. See paragraph no. 0066 in Kolosov et al. The sample size of each sample in the wells on the substrate is typically no greater than about 20 ml, more preferably no greater than about 5 ml, and most preferred, no greater than about 0.5 ml. See paragraph no. 0054 in Kolosov et al. To form an array of samples on the substrate, Kolosov et al teach that the samples and additives are dispensed into the wells with any suitable dispensing apparatus (i.e. an automated micropipette or capillary dispenser). The dispensing apparatus may have a heated tip, thus providing heating of the samples. Each sample is dispensed to an individually addressable region in the substrate. See paragraph no. 0053 in Kolosov et al. The plurality of samples can vary in number depending upon the intended use of the method, and the plurality of samples can form a library. A library comprises an array of two or more different samples spatially separated on a common substrate. Candidate samples within a library may differ in a definable and predefined way, such as in chemical structure, processing, mixtures of interacting components, the relative amounts of the components, the presence of additives and other reactant materials, etc. The samples are spatially separated on the substrate such that an array of samples is separately addressable for characterization thereof. The two or more samples can reside in separate containers formed as wells in a surface of a substrate or can be simply dispensed onto a common planar substrate. See paragraph no. 0057 in Kolosov et al. The apparatus taught by Kolosov et al comprises a stimulus generator 12 that applies power to a probe 14 for applying a stimulus to one or more samples 16 in the array or library of samples.

Art Unit: 1743

The apparatus also includes a sensor or transducer 20 for monitoring a response of one or more of the samples 16 to the stimulus. The transducer 20 and the stimulus generator 12 are both in communication with a computer sub-system 23 such as a microprocessor or other computer for manipulating data. The computer sub-system 23 may be employed to receive and store data such as responses of samples 16, material properties of samples, etc. Additionally, the computer sub-system may be employed to command other components of the system such as the stimulus generator and the dispensing means, as well as to correlate responses of samples 16 to their respective material properties. See paragraph nos. 0067-0068 in Kolosov et al. The probe 14 may be translated, rotated, reciprocated or oscillated within the samples so as to mix the samples and subject them to different forces. See paragraph no. 0070 in Kolosov et al. For contacting the probe 14 and dispensing means with the samples 16, the samples may be moved relative to the probe 14, or alternatively, the probe 14 may be moved relative to the samples 16. Combinations of these motions may also occur serially or simultaneously. An automated system may be used to move the one or more probes and the dispensing means serially or simultaneously to the various samples of a library. A suitable automated system is a robotic system such as an XYZ robot arm that has a multiple axis range of motion such as in the orthogonal X, Y, and Z coordinate axes system. This automated system is part of or in communication with the computer sub-system 23. See paragraph nos. 0073-0074 in Kolosov et al. Kolosov et al also teach that a plurality of control samples having known material properties are also monitored in the libraries along with the samples so that the responses of the samples can be compared with the known material properties of the controls. The responses of the samples in the library can be related to the known material properties by a mathematical relationship.

Based upon the combination of Carey et al and Kolosov et al, it would have been obvious to one of ordinary skill in the art to place the plurality of lubricating oil compositions containing additives therein taught by Carey et al in a plurality of test reservoirs that form a combinatorial array since Kolosov et al teach that it is advantageous to test a plurality of lubricants containing additives therein in an array format using combinatorial chemistry techniques because the combinatorial approach can effectively evaluate a much larger number of diverse compounds in a much shorter period of time.

17. Claims 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carey et al in view of Kolosov et al as applied to claims 20-26 above, and further in view of Smrcka et al. For a teaching of Carey et al and Kolosov et al, see previous paragraphs in this Office action. Carey et al fail to teach that the plurality of lubricating oil compositions containing additives therein can be tested in a plurality of reservoirs that form a combinatorial array, and that the results of testing can be stored in a data carrier or transmitted to a remote location.

Smrcka et al teach of a system and method for managing information pertaining to new product development. The method comprises the steps of testing a new chemical product, and storing the results in a data carrier such as a computer readable medium. All the data obtained through testing of a chemical product is stored in a central database. Remote access to the database is available globally from any personal computer having suitable client software installed and suitable network connectivity. See paragraph nos. 0011 and 0038 in Smrcka et al.

Based upon the combination of Carey et al, Kolosov et al and Smrcka et al, it would have been obvious to one of ordinary skill in the art to test the plurality of lubricating oil compositions containing additives therein taught by Carey et al in a plurality of test reservoirs that form a

Art Unit: 1743

combinatorial array for the reasons given above, and to store the results of testing in a data carrier that is available from a remote access site since Smrcka et al teach that it is advantageous to store the results of testing for products being newly developed on a computer readable data carrier that is available from a remote access site in order to share and disseminate the information concerning the new product to anyone in the world researching that product.

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Please make note of: Saul et al (WO 95/13538) and O'Rear et al (WO 02/07870) who teach of methods using combinatorial chemistry for synthesizing and screening a plurality of compounds.

Art Unit: 1743

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maureen M. Wallenhorst whose telephone number is 571-272-1266. The examiner can normally be reached on Monday-Wednesday from 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden, can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Maureen M. Wallenhorst
Primary Examiner
Art Unit 1743

mmw

May 16, 2005

Maureen M. Wallenhorst
MAUREEN M. WALLENHORST
PRIMARY EXAMINER
GROUP 1000 1700